

Work Order ID 75652

October-27-11 11:47:50 AM

75652

Page 1

Item ID: D4308-042 Accept *N900040100* Setup Start *NS1*

Revision ID: Stop *NS2*

Item Name: Step, RH Crew

Start Date: 27/10/2011 Start Qty: 2.00 *2*

Required Date: 07/11/2011 Req'd Qty: 2.00 *2*

Reference: Cust Item ID:

Customer:

Approvals: Process Plan: M.L.J Date: 11/10/27 Tooling: Date:

QC: Date: SPC (Y/N): Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4308	A								
100	Large Fab	0.00							
100									
Large Fab	Memo	0.00							
Large Fab	1-Cut D4308-1 using D2622 extrusion as per Dwg D4308 2-Drill, c'sink one hole on top of step as per dwg 3-Deburr and bevel ends for welding								
110	QC6- Inspect dimensions to drawing	0.00							
110									
QC	Memo	0.00							
Quality Control									
120	Weld per dwg A/R Aluminum rod Batch: 114514 Large Fab 118735	0.00							
120									
Large Fab	Memo	0.00							
Large Fab	1-Weld end cap (ONE END ONLY) 2-Grind end cap welds flush 3-weld lugs as per Dwg D4308								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 75652***75652***

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Item ID: D4308-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Step, RH Crew
Start Date: 27/10/2011 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 07/11/2011 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC9- Inspect visual per QSI004- Fusion Welds Memo	0.00 0.00				2	0	8/11/10/28	
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00		8 u/lw/28		(+2)			
150 *150* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00		11.10.28		2	0		

W/O:		WORK ORDER CHANGES					
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Item ID: D4308-042 Accept ***N900040100*** Setup Start ***NS1***
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 Item Name: Step, RH Crew
 Start Date: 27/10/2011 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 07/11/2011 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				<u>12</u>			
170 *170* Large Fab Large Fab	Weld per dwg A/R Aluminum rod Batch: <u>114514</u> Large Fab Memo 1-Inspect for foreign object per QSI 024 2-Weld Remaining end cap as per Dwg D4308 3-Grind end cap weld flush as per dwg D2841 4- install rivert as per dwg	0.00 0.00				<u>2</u>	<u>0</u>		<u>11.10.28</u>
180 *180* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00				<u>2</u>	<u>0</u>	<u>BE 11/11/02</u>	

W/O:		WORK ORDER CHANGES					
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 Start Date: 27/10/2011 Start Qty: 2.00 ***2*** Cust Item ID:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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190	QC5- Inspect part completeness to step on W/O	0.00							
190									
QC	Memo	0.00							
Quality Control									

200	Chemical Conversion Coat per QSI005 4.1	0.00							
200									
HandFinish	Memo	0.00							
Hand Finishing									

210	Spray Painting per QSI005 4.2	0.00							
210									
SprayPaint	Memo	0.00							
Spray Painting	***BLUE***								

powder coat
m 118439

Start Time: 8:10
Temp: 320 °F
Finish Time: 8:40
white perdst 005

11 - 11 - 02 (2)

2x4 m-11/11/02

2x4 m-11/11/03

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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
211 *211* QC Quality Control	<i>W</i> <i>DL3</i> QC14-Inspect Spray Paint Memo	0.00 0.00				<i>2</i>	<i>BL 11-11-3,</i>		
215 *215* HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <i>118988</i> Memo	0.00 0.00				<i>2</i>	<i>BL 11-11-3,</i>		
220 *220* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00					<i>11/11/35/20</i>		

W/O:		WORK ORDER CHANGES					
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 Start Date: 27/10/2011 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 07/11/2011 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	Identify as per dwg & Stock Location: _____	0.00							
230									
Packaging	Memo	0.00							
Packaging									
240	QC21- Final Inspection - Work Order Release	0.00							
240									
QC	Memo	0.00							
Quality Control									

ME
11-11-03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Picklist Print

October-27-11 11:47:58 AM

Page 1

Work Order ID: 75652

75652

Parent Item: D4308-042

D4308-042

Parent Item Name: Step, RH Crew

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 11.01.07 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2622-120C

Manufactured No

Each 66.1200

0.1

D2622-120C

Step Extrusion

**

11.10.28

Location

Loc Qty

Loc Code

HALL

56.42

64409

6

68293

0.5

72131

49.92

WA

9.7

46910

2

66970

7.7

0.1

D2734

Manufactured No

120

Each

64.0000

1

2

D2734

Step End Plate

**

11.10.28

Location

Loc Qty

Loc Code

WA

64

73196

4

73416

60

2

D3458-1

Manufactured No

120

Each

9.0000

1

2

D3458-1

Step Mounting Plate

**

11.10.28

Location

Loc Qty

Loc Code

WA

8

71593

8

WA018

1

63075

1

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

October-27-11 11:47:58 AM

Page 2

Work Order ID: 75652

75652

Parent Item: D4308-042

D4308-042

Parent Item Name: Step, RH Crew

Start Date: 27/10/2011

Required Date: 07/11/2011

Start Qty: 2.00

Required Qty: 2.00

D3458-3 Manufactured No

120

Each

14.0000

1

2

D3458-3

Step Mounting Plate

**

11.10.28

Location

Loc Qty

Loc Code

WA

315610

14

73327

14

2

D2734 Manufactured No

170

Each

64.0000

1

2

D2734

Step End Plate

**

11.10.28

Location

Loc Qty

Loc Code

WA

64

73196..

4

73416

60

2

MS20601AD4W2

live

[Signature]

M119232 = 2

11.10.28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

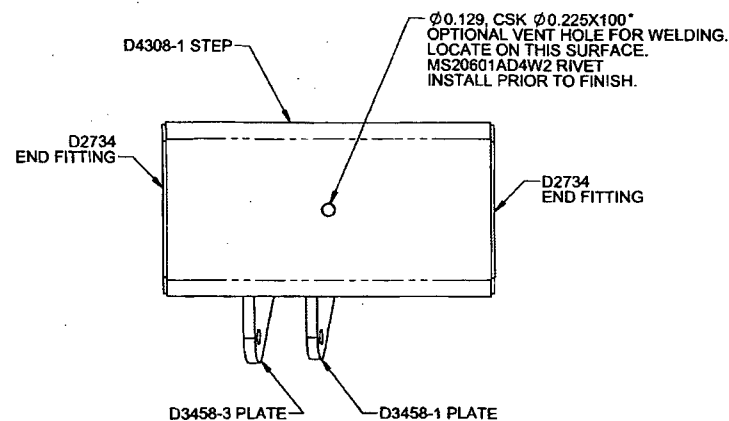
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

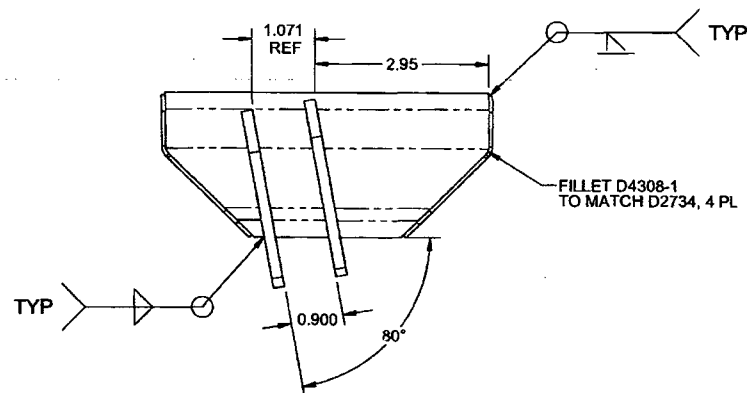
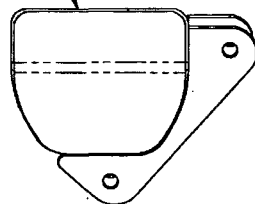
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D4308-041	STEP, LH CREW
2	1	D4308-1	STEP
3	2	D2734	END PLATE
4	1	D3458-1	PLATE
5	1	D3458-3	PLATE
6	1	MS20601AD4W2	RIVET (OPTIONAL)



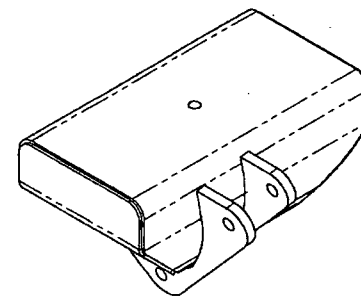
2 APPLY BLACK ANTI-SKID ON TOP SURFACE TO BOTTOM OF TOP RADIUS



D4308-041 STEP, LH CREW

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: P/N & B/N PER DART QSI 044 6.6 (REMOVABLE TAG)
- 7) WEIGHT: 0.47 lb
- 8) WELDING: PER DART QSI 004



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 75652 M.C.J.

11/10/27

RELEASED
2011-05-26
JNT

A	NEW ISSUE	CP	10.12.17
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.12.17		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D4308
REV. A
SHEET 1 OF 3

TITLE STEP, CREW
SCALE NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

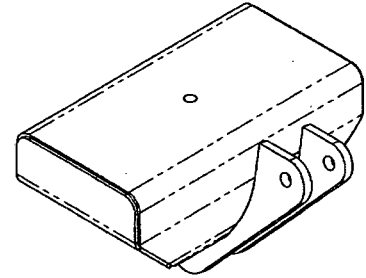
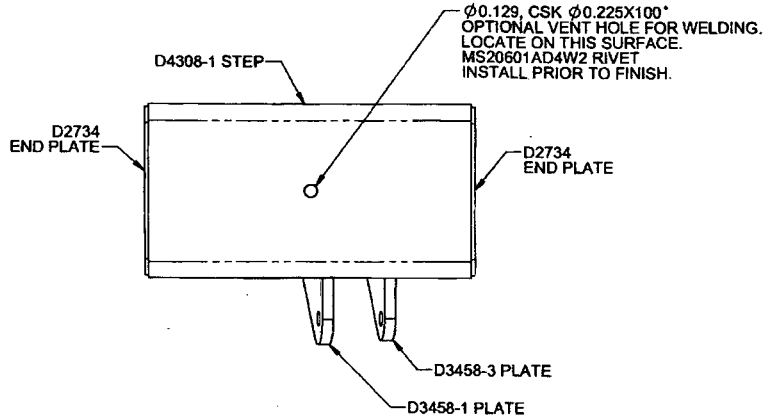
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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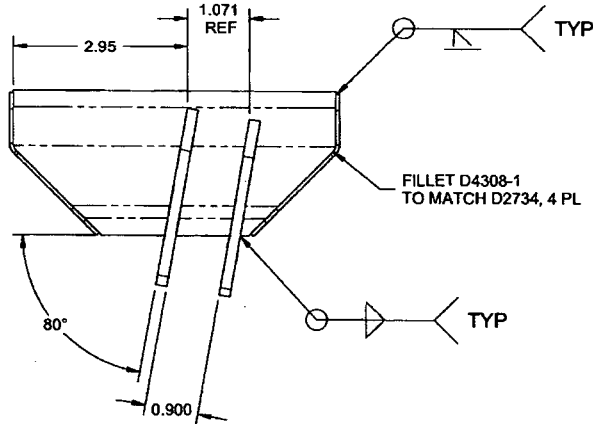
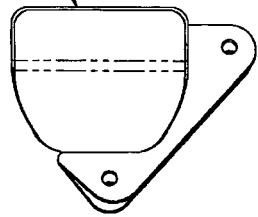
NOTE: Date & initial all entries

75652

ITEM	QTY -042	P/N	DESCRIPTION
1	X	D4308-042	STEP, RH CREW
2	1	D4308-1	STEP
3	2	D2734	END PLATE
4	1	D3458-1	PLATE
5	1	D3458-3	PLATE
6	1	MS20601AD4W2	RIVET (OPTIONAL)



2 APPLY BLACK ANTI-SKID ON TOP SURFACE TO BOTTOM OF TOP RADIUS



D4308-042 STEP, RH CREW

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: P/N & B/N PER DART QSI 044 6.6 (REMOVABLE TAG)
- 7) WEIGHT: 0.47 lbs
- 8) WELDING: PER DART QSI 004

RELEASED
2011-05-24

DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D4308
MFG. APPR.		REV. A
APPROVED		SHEET 2 OF 3
DE APPR.		TITLE STEP, CREW
DATE	10.12.17	SCALE NTS
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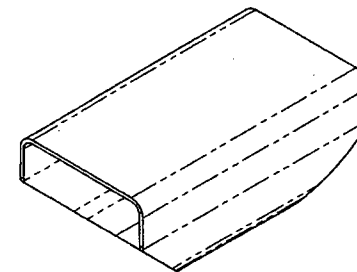
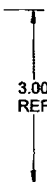
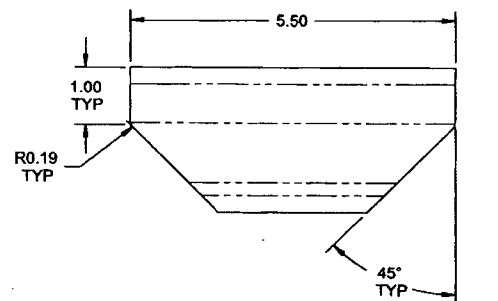
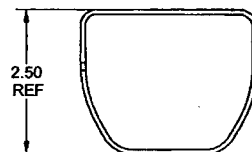
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NOTE: Date & initial all entries

75652



D4308-1 STEP

RELEASED
2011-05-20
JW

NOTES:

- 1) MATERIAL: MAKE FROM D2622 EXTRUSION
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.33 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	ASS	DRAWING NO.	REV. A
MFG. APPR.		D4308	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		STEP, CREW	NTS
DATE	10.12.17	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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